

Engineering geological characteristics of artificial soils in Kazan city (Russia)

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Abstract

© SGEM 2014. Zoning by type and thickness of artificial soils was conducted in 2012. Following categories of artificial soils were identified : sandy and loamy fill-up soils, sandy hydraulically filled soils, soils from industrial dumps, modern dissimilar fill-up soils, which contain household and construction debris, cultural layer soils. Special attention in this article is given to geological and engineering assessment of heterogeneous fill-up soils and industrial wastes. Our investigations show that these soils are characterized by high chemical and microbiological aggressiveness to underground constructions, which undoubtedly require anti-corrosion actions.

Keywords

Artificial soils, Chemical aggressiveness of soils, Microbiological aggressiveness of soils